## CAPITAL ASSET REALIGNMENT FOR ENHANCED SERVICES



### VISN 12 Service Delivery Options

JUNE 19, 2001

# for the **Department of Veterans Affairs**



**BOOZ-ALLEN & HAMILTON** 

#### **TABLE OF CONTENTS**

#### **EXECUTIVE SUMMARY**

1.	VA embarked on its CARES initiative to ensure that its capital infrastructure would meet veterans' needs for healthcare services in 2010 and beyond	2
2.	Booz-Allen developed a data-driven study methodology to define a range of healthcare service delivery options.	4
3.	The options will be evaluated by VA experts using a two-step process.	5
4.	VISN 12 currently provides a full continuum of healthcare services to approximately 219,960 veterans through eight VA medical centers, specialized clinics, 29 community based outpatient clinics, five nursing homes, and contracted services with other healthcare providers.	6
5.	The CARES planning process uses a market-driven/need-based approach to find ways to enhance healthcare services to veteran enrollees.	8
6.	Designing a healthcare system involves providing a full continuum of care in a tiered fashion.	9
7.	A variety of options were developed for delivering healthcare to veterans, each with its own advantages and disadvantages.	10
8.	VA will evaluate the options against the established criteria, consider factors that may alter planning assumptions, and obtain feedback from veterans and other stakeholders	15
9.	The selected options, together with the facility data and analysis in this report, provide a strategic "blueprint" for VA's ten year asset realignment funding decisions on individual projects.	16
10.	The CARES process after the evaluation phase will involve significant opportunities for public dialogue.	18
11.	The full report presents the results to date of Booz·Allen's study of capital asset realignment options for the Great Lakes Health Care System (VISN 12)	18
CHA	APTER 1. INTRODUCTION	
1.1	The CARES process was developed in response to changing healthcare practices, veterans' demographics, and the high cost of maintaining VHA facilities.	1-2
1.2	The Booz-Allen & Hamilton Phase 1 Study effort is one component of the overall CARES process.	1-2
1.3	This report is also the prototype for developing strategic facilities options for other VISNs in the VHA's Integrated Service Network.	1-3
1.4	Phase 1 will continue with significant opportunities for stakeholder input.	1-8

### CHAPTER 2. SUPPLY OF HEALTHCARE SERVICES IN THE GREAT LAKES HEALTHCARE SYSTEM (VISN 12)

1.2	VISN 12, the VA Great Lakes Health Care System, currently operates 37 separate service delivery sites serving veterans in 96 counties in 5 states covering 71,330 square miles.	2-1
2.2	2 VA Supply of Healthcare Services	2-1
2.3	B Existing Facility Baseline	2-7
2.4	4 Community Supply of Healthcare Services	2-21
2.5	VISN 12 continues to reengineer its healthcare delivery system from a hospital-based, inpatient system to an integrated healthcare delivery system.	2-21
СНАР	PTER 3. DEMAND FOR HEALTHCARE SERVICES	
3.1	The total number of veterans eligible to receive care in VISN 12 is projected to continue to decline; however, recent enrollment efforts have, due to changes in enrollment eligibility rules, maintained a level base of patients	3-2
3.2	The percentage of eligible veterans enrolled in the VA varies significantly by county	3-3
3.3	VISN 12 facilities provide care for patients who travel from beyond the VISN geographic boundaries, particularly for special disability programs.	3-4
3.4	Historic utilization trends suggest significant changes have occurred in how care is delivered—shifts have occurred in care settings and there have been reductions in the length of stay for inpatients.	3-5
3.5	The Booz-Allen CARES Team used current demand and service utilization as the foundation for the CARES process.	3-7
3.6	The actuary Estimated future demand for acute inpatient and ambulatory services based on a private sector model that includes assumptions influencing both patient admissions and length of stay.	3-9
3.7	The actuary modeled veteran population demographics and enrollment patterns using enrollment priority levels to predict service utilization and demand for 2010.	3-10
3.8	To incorporate the demand projections from the actuary, the Booz-Allen CARES Team adopted a consistent and uniform approach to the measurement of service utilization	3-12
3.9	The pilot application of demand forecasting methodologies within VISN 12 has revealed the need to vary the demand forecasting method depending upon the clinical service being modeled.	3-13

3.10	The projections of future demand in VISN 12 suggest a decline in inpatient acute care demand and increases in extended and long-term care and in ambulatory care demand	3-14
3.11	The projections of future demand for each market are based on the estimated size and demographics of the population in each market.	3-20
CHA	PTER 4. PLANNING PRINCIPLES	
4.1	The geographic distribution of demand was a fundamental driver of SDO development	4-2
4.2	To better define markets and appropriately place healthcare services, standards for access times needed to be developed.	4-2
4.3	After identifying the principal population clusters in VISN 12, we used the time/distance access standards to define 13 submarkets that were aggregated to form three major markets.	4-4
4.4	Once the demand submarkets were defined, a tiered system of supply, from primary care to tertiary care, was developed to meet the needs of each submarket.	4-7
4.5	In distributing supply to projected demand we constructed options that could scale up or down based on future fluctuations of demand.	4-9
4.6	Special disability services are a unique mission and core competency of VA and figured prominently in option development.	4-10
4.7	The Absolute and Discriminating Criteria are evaluation tools but they also inform the process of SDO development.	4-10
4.8	In summary, the principles described in this chapter provide a foundation for understanding the SDOs presented in the following chapter.	4-12
СНА	PTER 5. SERVICE DELIVERY OPTIONS	
5.1	While status quo is an option, the impact on healthcare services do not meet VA's evaluation criteria	5-3
5.2	The blank slate scenario allows pure demand to drive facility planning, but is not a viable option.	5-4
5.3	The capital planning decision in the Southern Market is how best to utilize existing facilities when 155 to 190 acute beds are needed inside the city limits of Chicago to meet veterans' healthcare needs.	5-8
5.4	In the Central Market, the primary questions revolve around balancing access/travel time with current equity.	5-27
5.5	In the very large and sparsely populated Northern Market, the issues are whether to rely more on the private sector to help improve access and whether to retain the existing VAMC.	5-41

5.6	Community-Based Outpatient Clinics (CBOCs) provide an essential component of the infrastructure in delivering primary care, which remains constant through all SDOs	5-46
5.7	We distributed new CBOCs to improve primary care access in the Central and Northern Markets.	5-47
CHA	PTER 6. CAR PLANS	
6.1	VISN 12 Facility Capital Investment Profile	6-2
6.2	CAR Plan – Option A	6-6
6.3	CAR Plan – Option B	6-18
6.4	CAR Plan – Option C	6-30
6.5	CAR Plan – Option D.	6-42
6.6	CAR Plan – Option E	6-54
6.7	CAR Plan – Option F	6-63
6.8	CAR Plan – Option G	6-72
6.9	CAR Plan – Option H.	6-80
6.10	CAR Plan – Option I	6-84
СНА	PTER 7. COST ANALYSIS	
7.1	This chapter presents the results of Booz·Allen's cost analysis of the proposed Service Delivery Options for VISN 12.	7-1
7.2	The cost of current operations serves as the starting point for projecting future baseline and SDO costs.	7-3
СНА	PTER 8. SENSITIVITY ANALYSIS	
8.1	To ensure appropriate capacity, upward and downward scalability are designed into the SDOs.	8-2
8.2	The scalability of the SDOS is critical in meeting fluctuating demand over time	8-3

#### **APPENDICES**

- A. Abbreviations / Acronyms
- B. Glossary
- C. References
- D. Stakeholder Communications
- E. Options from 1999 Study
- F. Community Resources
- G. Demand For Healthcare Services
- H. Ambulatory Provider Productivity Benchmarks
- I. Market Methodology
- J. Capital Asset and Facility Planning Methodology
- K. Facility Valuation (BOV) Reports
- L. Cost Analysis
- M. SDO Scalability
- N. Procedure Volume and Clinical Outcomes
- O. Authorized Beds and Occupancy Rates